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09/751,841	01/02/2001	Ross Heitkamp	0023-0004	9281

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EXAMINER

DANG, KHANH NMN

ART UNIT	PAPER NUMBER
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2181

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DATE MAILED: 07/15/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

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# Office Action Summary

Application No.

09/751,841

Applicant(s)

HEITKAMP ET AL.

Examiner

Khanh Dang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 5-29 is/are rejected.
- 7) ☒ Claim(s) 4 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_ 6) ☐ Other: \_\_\_\_

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## DETAILED ACTION

### ***Claim Rejections - 35 USC § 112***

Claims 21, 22, and 26 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With regard to claims 21 and 22, the essential structural cooperative relationships between elements recited in claim have been omitted, such omission amounting to a gap between the necessary structural connections. MPEP 2171.02.

With regard to claim 26, the essential structural cooperative relationships between the means plus functions recited in claim have been omitted, such omission amounting to a gap between the necessary structural connections. MPEP 2171.02.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 3, 5-9, 11-18 are rejected under 35 U.S.C. 102(b) as being anticipated by

Khosrowpour et al.

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It is first noted that similar claims will be grouped together to avoid repetition in explanation. As broadly drafted, these claims do not define any structure that differs from Khosrowpour et al. With regard to claims 1, 5, 6, 7, 8, 11, 12, 13, 14, 15, and 26, Khosrowpour et al. discloses a control system, comprising: a bus (104); a master device (102) connected to the bus and configured to commence a bus cycle that includes an address interval and a data interval, provide a destination address on the bus during the address interval, and transmit or receive a command or data during the data interval; and a plurality of slave devices connected to the bus and configured to detect commencement of the bus cycle, sample the destination address from the bus a predetermined amount of time after commencement of the address interval, and transmit or receive a command or data during the data interval. Note that SMB (104) employs I2C Bus. I2C is a 2-wire serial interface standard defined by Philips Semiconductor. The I2C Bus physically consists of 2 active wires and a ground connection. The active wires, SDA and SCL, are both bi-directional. SDA is the Serial Data line and SCL is the Serial Clock line. The I2C interface is a master/slave type interface. Only two lines (clock and data) are required for full duplexed communication between multiple devices. With I2C, each IC on the bus has a unique address. A device that controls signal transfers on the line in addition to controlling the clock frequency is the master and a device that is controlled by the master is the slave. The master can transmit or receive signals to or from a slave, respectively, or control signal transfers between two slaves, where one is the transmitter and the other is the receiver. I2C bus support more than one master connected to one bus. It is possible to combine several masters, in addition to several slaves, onto an I<sup>2</sup>C-bus to form a multi-master system. To begin communication, the bus master places the address of the device with which it intends to communicate (the slave) on the bus. All ICs monitor the bus to determine if the master device is sending their address. Only the device with the correct address communicates with the master. I2C Specification is readily available at Philips Semiconductor. Also see at least claim 1; Figs. 1, 1A, and 2 and description thereof). With

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regard to claim 3, see above and Fig. 1A and description thereof. With regard to claim 9, the sample circuit of Khosrowpour et al. resamples data bit after the reset of the control logic after a predetermined time. With regard to claim 16, since the system of Khosrowpour et al. is a server-type and can be controlled remotely it can be said that such a system is a "network device." With regard to claims 17 and 18, one using the system of Khosrowpour et al. would have performed the same steps set forth in claims 17 and 18.

Claims 1-3, 5-9, 11-18, 23, 24, 26-29 are rejected under 35 U.S.C. 102(b) as being anticipated by Dickson et al.

It is first noted that similar claims will be grouped together to avoid repetition in explanation.

As broadly drafted, these claims, after the word "comprising," do not define any structure that differs from Dickson et al. With regard to claims 1-3, 5-9, 11-16, 23, 24, 26-29, Dickson et al. discloses a network device, comprising: a plurality of redundant buses (17, 20); a plurality of redundant master controllers (18, 19) connected to corresponding ones of the buses (17, 20), one of the master controllers being an active master and other ones of the master controllers being standby masters, the active master being configured to commence a bus cycle that includes an address interval and a data interval, provide a destination address on the corresponding bus during the address interval, and transmit or receive a command or data during the data interval; and a plurality of slave controllers (peripheral device controllers, see also col. 2, lines 34-37) connected to the bus and configured to detect commencement of the bus cycle, sample the destination address from the bus a predetermined amount of time after commencement of the address interval, and transmit or receive a command or data during the data interval. See at least Figs. 1-4 and description thereof. With regard to claims 17 and 18, one using the system of Dickson et al. would have performed the same steps set forth in claims 17 and 18.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 10, 19, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Khosrowpour et al.

Khosrowpour et al., as discussed above, disclose the claimed invention except the use of a "5 clock cycles." It would have been obvious to one of ordinary skill in the art at the time the invention was made to use "5 clock cycle" in Khosrowpour et al., since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dickson et al.

Dickson et al., as discussed above, discloses the claimed invention except the use of master controllers as "router" and slave controllers as "switching and forwarding modules." It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the system of Dickson et al. in a network environment (note that every network includes routers and switches), since it has been held that the manner in which a claimed apparatus is intended to be employed (in a network environment) does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ2d 1647 (1987).

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***Allowable Subject Matter***

Claim 4 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 21 and 22 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

U.S. Patent Nos. 5,421,002 to Lee et al., 4,634,110 to Julich et al., 5,771,247 to Allen et al., 5,564,025 to De Freese et al., and 5,166,678 to Warrior are cited as relevant art.

Any inquiry concerning this communication should be directed to Khanh Dang at telephone number 703-308-0211.



**Khanh Dang  
Primary Examiner**